

Pleomorphic adenoma (PA) is the most common benign neoplasm of the salivary gland and shows remarkable morphological diversity. It, malignant transformation is not very rare. Mutation in the tumor suppressor gene (p53) may lead to the progression of this tumor. The purpose of this study was to analyze the immunohistochemical expression of p53 in salivary glands PAs in relation to sex, age, primary anatomical site, the duration, size and histopathological subtype of the tumor.

The materials used in this study consist of (45) paraffin-embedded salivary gland biopsy specimens of benign pleomorphic adenoma of salivary gland. The p53 immunoreactivity was semi-quantitatively evaluated in 1000 cells examined under the microscope at x40 magnification and recorded as percentage of p53 positive tumor cells over the total number of cells examined in the area.

PAs showed negative expression of p53 in 60% of cases. The p53 labeling index was ranging between 6% to 70%. Statistical analysis showed no significant relation of the mean labeling indices with the sex, age, duration of the tumor, size, and histopathological subtype ($p > 0.05$), but it showed significant relation with the gland site ($p < 0.05$).